

# HEMI-SYNC Journal

Vol. VIII

Spring 1990

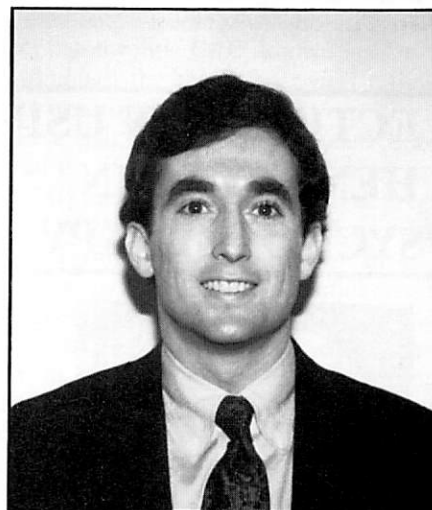
No. 2

A Publication of The Monroe Institute  
Professional Division

---

## EEG AND SUBJECTIVE CORRELATES OF ALPHA FREQUENCY BINAURAL BEATS STIMULATION COMBINED WITH ALPHA BIOFEEDBACK

---



by Dale S. Foster, Ph.D.

### IN THIS ISSUE

**EEG and Subjective Correlates of Alpha-Frequency Binaural Beats Stimulation Combined with Alpha Biofeedback ..... 1**

Abstract excerpted from the doctoral dissertation of Dale S. Foster, Ph.D.

**Reflections on Using Hemi-Sync in Psychotherapy ..... 2**

Psychoanalyst Sylvia B. Perera, M.A., offers insights into the role of Hemi-Sync within the client-therapist relationship.

**Epstein-Barr and Post-Viral Fatigue Syndrome Symptoms Relieved with Hemi-Sync ..... 3**

Jill Russell, L.C.S.P., and Ronald Russell, M.A., present clients' symptom management techniques using Hemi-Sync.

**Brainmapping Project Update ..... 4**

F. Holmes Atwater, TMI's Brainmapping Project Coordinator, reports on the current status of the Brainmapping Project.

**Jin Shin Jyutsu and Hemi-Sync in the Treatment of Quadriplegia ..... 6**

In a case study, ChowChow Imamoto, R.N., Ms.D., describes her use of energy balancing techniques combined with Hemi-Sync.

*Dale Foster is a counseling psychologist in Germantown, Tennessee, and has been a member of the Professional Division since 1987. He holds a master of arts in religion degree in counseling from Harding Graduate School and recently received his doctoral degree from Memphis State University. The following article is the abstract from Dr. Foster's dissertation excerpted for the HEMI-SYNC JOURNAL. [ed.: also see BREAKTHROUGH, Vol. VII, No. 4, "Hemi-Sync and the Personal Computer..."]*

The purpose of this study was to determine the effects of alpha frequency binaural beats stimulation combined with alpha biofeedback on alpha frequency brain-wave production and subjective experience of mental and physical relaxation. The study compared the alpha brain-wave production and subjective report of mental and physical relaxation of four groups, each of which received brief relaxation response training and one of four treatments: 1) alpha frequency binaural beats stimulation, 2) visual alpha frequency brain-wave biofeedback, 3) alpha frequency binaural beats stimulation combined with visual alpha biofeedback, or 4) artificially produced ocean surf sounds. Sixty volunteer undergraduate and graduate students were randomly assigned to the four groups and instructed to utilize their respective treatment as the "mental device" in Benson's relaxation response paradigm while they relaxed with eyes open for twenty minutes.

Two 2 X 4 mixed ANOVAs revealed that all groups evidenced increased subjective reports of relaxation and increased alpha production. An interaction effect was found in which the group with both alpha binaural beats and alpha biofeedback produced more treatment alpha than the group with alpha biofeedback alone. Additionally, nine of the fifteen subjects with both binaural beats and feedback reported being able to control alpha production via their focus on the alpha binaural beats. The data suggest the possibility that binaural beats can be used to evoke specific cortical potentials through a frequency-following response. Further investigation is warranted into the possibilities of using binaural beats alone and in conjunction with brain-wave biofeedback to promote the self-regulation and management of consciousness.

## REFLECTIONS ON USING HEMI-SYNC IN PSYCHOTHERAPY



by Sylvia Brinton Perera, M.A.

*Sylvia Perera is a psychoanalyst in private practice in Sherman, Connecticut, and a teacher at the C.G. Jung Institute of New York. She is the author of several books, including The Scapegoat Complex: Toward a Mythology of Shadow and Guilt; Descent to the Goddess: A Way of Initiation for Women; Dreams, A Portal to the Source: Clinical Guide for Therapists (with E.C. Whitmont). Subjects of her published articles include Celtic mythology and rituals in analysis. Ms. Perera has been a member of the Professional Division since February of 1989. The following "reflections" offer insights into the role of Hemi-Sync within the client-therapist relationship.*

I used the 201B Hemi-Sync Synthesizer in sessions with five patients during a month-long "research" period to try to estimate what effects the use of Hemi-Sync might have. I prepared the clients differently for the use of a mechanical

adjunct to the usual therapy, and I noted individual results. In all cases, however, there was a marked change in *my* feeling relaxed, alert, and centered, which must have had an impact on the therapeutic field. There was also increased client ability to perceive and to verbalize what I am now calling "derivative messages of balance." I have italicized some of these below. These derivative messages of balance were particularly noteworthy in two borderline clients. The tendency to split perceptions and emotions into mutually exclusive either-or states is part of the borderline diagnostic picture. But the same effect occurred with a manic-depressive female client and a male with severe compulsive and intellectualizing defenses.

One borderline woman with a history of self-mutilation and psychotic ideation came into the session in panic, feeling paranoid that a "man had been watching" her on the train. I was playing surf with Beta, Delta, Theta at a level just below traffic noise, so it was not really audible. She had been previously informed that I at some point would try surf and other sounds in the room. She gave no indication that she heard the tape. I had been silent except for a brief question to elicit the objective facts about her experience on the train. She began to relax after twenty minutes of whimpering like a fearful infant that alternated with hypervigilant arousal and urges to hurt herself again. She then said, "I can begin to relax into my body. I can begin to feel safe . . . Oh, I can see *something double*. Feeling safe and being watched and hated can be *together*. That's weird. That never happened before." In a later session with the same Hemi-Sync setting she talked about "feeling real in a space we share—not alone in terror. You are there—here, too. I can be with you *together*."

A manic-depressive, hysteroid woman in the first session during which I used Hemi-Sync remembered a dream of "*standing between two men*, so I am not afraid." She then spoke more coherently than usual, with less manic anxiety. She eventually, in the same session, provided a derivative message of balance quite explicitly by talking about "*balances* [she could feel] between light and dark parts of [her] body, above and below." At another session she reported that she could get "an *overview* [of her sense] of shame."

With the intellectualizing male client I tried the Delta, Theta setting to attempt to outflank his normal conceptualizing persona. We both nearly went to sleep. I switched to add Beta, and the profound inertial pull continued. During six sessions of this state, we were mutually able to experience and acknowledge the power of nearly autistic defenses under his previous glib, left-brain talk. Exploring these deeper defenses led into memories of the abuses that had walled off his vivid emotional life in early childhood. About three months later I tried the Beta, Delta, Theta setting and he responded immediately by talking about "*balancing* conceptual and emotional sides" of himself.

To a severely phobic client, I urged the use of the *Deep 10 Relaxation* tape I lent him. After using it a few times with what he reported were positive results, he lost the tape. This provided analytic material to begin to analyze the grip—and secondary gains—of the phobic responses. Another client refused to use a tape at home, feeling I was shoving her off with a surrogate caretaker, as her mother had done by leaving her with maids. But she has responded well to the synthesizer in sessions. Hemi-Sync seems to help her to process her dependency cravings more realistically. I used Beta,

Delta, Theta with her, but sometimes started the session with Theta, Delta when she was manic, and switched to Theta, Beta when she is what she calls "awash and murky."

These are anecdotal data. It is impossible for me to do anything more hardline experimental with living clients in an intentionally therapeutic field—even though therapy by its very nature is somewhat experimental and improvisational. For example, I cannot tell how much of the effects were due to the Hemi-Sync sounds on the clients or, as I indicated, how much they helped me to stay centered and objective as a research observer and thus affected the mutual field. In either case, I do think there was a benefit. And with the particular borderline woman I mentioned, I attribute her slow but radical shift to that month of sustained use of the synthesizer. I chose to use it after three years of work with her. Why that moment felt "right" and why and when I choose to use Hemi-Sync with which clients is something about which I am still musing. It may be that there is a need to explore fully the nonbalanced states until I have an intuition that a synthesizing stage is appropriate.

Since that month of research, I have been using the synthesizer quite intuitively. It is very hard to know what exactly is going on in such a complex, multidimensional field as psychotherapy, especially as the observer here is part of the field.

---

## EPSTEIN-BARR AND POST-VIRAL FATIGUE SYNDROME SYMPTOMS RELIEVED WITH HEMI-SYNC

---



by Jill Russell, L.C.S.P., and Ronald Russell, M.A.

*Jill is a remedial therapist in private practice in Cambridge, England. Ronald Russell is a lecturer and author. The Russells offer courses using Hemi-Sync extensively, through their Cambridge center in addition to serving private clients. The Russells have been associated with*

*the Professional Division since 1987 [ed.: also see BREAKTHROUGH, Volume VII, No. 4, "Hemi-Sync Workshop Development and Presentation"]. This account of two clients' management of Epstein-Barr and Post-Viral Fatigue Syndrome symptoms represents the first written reporting on the use of Hemi-Sync with these diagnoses.*

Two female clients came to see us, quite independently, early in 1989. One client, 26, worked as a finance adviser; the other, 21, is an art student. Following different illnesses, both had been unable to work for several months and one was forced to postpone the final year of her degree course. Also, both had been recently diagnosed as suffering from myalgic encephalomyelitis (ME; known also as Epstein-Barr Syndrome) although the term "post-viral fatigue syndrome" had also been used by their doctors.

On the first visit, both clients seemed debilitated; they complained of tiredness, muscle fatigue after exercise of any sort, inability to concentrate, and general depression, all classic symptoms of ME. Despite the depression, they had refused tranquilizing or antidepressant drugs. They were clearly very unhappy, had lost their confidence, and saw little prospect of recovery.

We felt that the *HUMAN PLUS* series, then only recently launched, might help them to handle the symptoms of their illness and to direct the body's own healing powers. After two individual sessions, we arranged to see them together. They soon became close friends, giving each other valuable support.

We began by offering the *H-PLUS* tapes *Prep* and *Relax*. Their comments were: "This is the most relaxed I've felt for years. Unlike drugs it can only do me good." Next we introduced *Reset*, *Restorative Sleep*, *De-Tox: Body, Immunizing, Let Go*, and *Tune-Up*. We suggested that they also choose their own tapes from our comprehensive tape library. We introduced them to the first three tapes in the *Discovery* album from the *GATEWAY EXPERIENCE* home course. Later they joined our "Renewal & Development" programme, an eight-session weekly course using exercises in Focus 10 and 12.

Both clients reported on their experiences with the tapes. The 26-year-old female uses ten *H-PLUS* Functions daily: *Restorative Sleep*, *Circulation*, *Tune-Up*, *De-Tox: Body, Off-Loading*, *De-Hab*, *Relax*, *Heart: Repairs & Maintenance*, *Brain: Repairs & Maintenance*, *Lungs: Repairs & Maintenance*, and others when needed. She has developed her own Function Command, "Energy . . . Heal," which she uses several times a day. She found *Empathizing* useful and thought it achieved an understanding with her hospital doctor. "We were communicating beyond the spoken word," she says. She also found the *Discovery* tapes very helpful in giving her security and confidence.

"The tapes provide a safe environment in which to get to know myself," she said. "I'm feeling in control again after a period of feeling controlled by illness and doctors. *H-PLUS* gives me freedom and encouragement to recognize my own needs and to use the appropriate tapes as a solution in the form of a command . . . The more you use the commands the more they will work . . . The more I use the tapes the more I see that everyone could benefit in some way. Like me, those



who do not admit it, even to themselves, are the ones who need it most. I have learned to ask for what I want and not to feel guilty about getting it. I feel stronger and happier with myself."

The 21-year-old female commented on tapes which she found especially helpful:

*Eight-Great*—good for confidence;

*Energy Walk*;

*Light Foot*—I imagine myself running—it did seem to lighten my step too;

*Brain: Repairs & Maintenance*—Very good for sharpening up my brain functions . . . it feels like I'm thinking more clearly and efficiently . . . It's enough to remind me how my brain used to feel and to know that sometime it will go back to being like this again;

*Empathizing*—useful for trying to understand how difficult it is for other people to cope with my illness, as well as myself; and

*Recharge*.

She added: "Discovery 1, 2, and 3 are brilliant for confidence and to [help you] feel like you can achieve things. It's like a balance is really being found inside my mind. I guess it's putting things in proportion; important, because it's

---

*"I'm much more in control and feel less tense  
and more confident . . ."*

---

sometimes hard to live in the real world when you are isolated and living a life very different to the one you were used to . . . I'm very pleased with the help the tapes have given me. I'm much more in control and feel less tense and more confident . . . It's like relearning the things you knew as a child—and makes me feel like I'm doing things for myself—great for confidence again! It's marvelous to feel my mind isn't just a soggy lump of cotton wool, which it used to feel like."

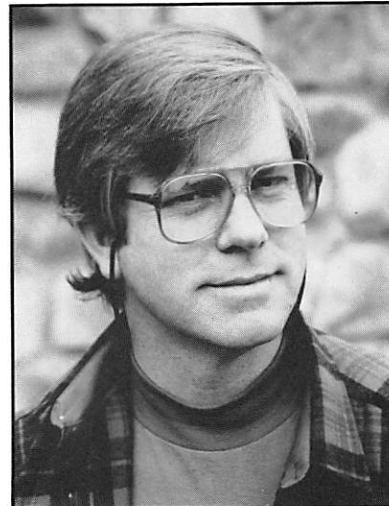
While neither client is completely "cured," both have gone a very long way to being able to cope effectively with their symptoms. The 26-year-old has resigned from her job and is seeking a new career; she is soon to begin a course in remedial massage. The 21-year-old is working on her thesis, has contributed cartoons to a book, and is due to return to college shortly to complete her coursework. Each has taken time to listen to all the *H-PLUS* tapes and has joined the ME society so that they can help and advise others who suffer from this distressing complaint.

Both women still have days when they become extremely fatigued and need periods of rest, but mentally they are now attuned to handling these symptoms and they soon recover from them. It is worth noting that they both worked intensively with the tapes, never despairing when a Function did not immediately click into place, but persisting and seeking alternatives. They have learnt much from their experience over the past nine months—but possibly we have learnt even more. And that is not just about the effectiveness of Hemi-Sync and the flexibility of the *H-PLUS* programme, but also about the determination and resourcefulness of the human spirit.

---

## BRAINMAPPING PROJECT UPDATE

---



by F. Holmes Atwater

*F. Holmes Atwater, a retired military officer, has been a college instructor, scientific investigator, and behavioral engineer specializing in the design and application of methods for developing advanced human potential. He received a B.S. degree from the University of Nebraska and completed graduate coursework in counseling psychology at the University of Northern Colorado. Mr. Atwater, associated with TMI since 1977, became the Brainmapping Project Coordinator in September of 1988.*

In March 1989, TMI purchased a "BEAM" or Brain Electrical Activity Mapping type of device called the NRS-24 and a computerized physiological monitoring instrument called the J&J System I-330 and obtained funds for a research/laboratory effort which would:

- a. Objectively document the physiological (EEG and other) effects of current Hemi-Sync technology.
- b. Develop improved Hemi-Sync processes, including the expansion of operating and productive functions.
- c. Provide individualized, professionally monitored, personal sessions for those who wish to examine their own brain patterns.

This effort, now called the Brainmapping Project, has as its purpose the improvement of the Hemi-Sync process itself. The Brainmapping Project is not a research effort designed to conduct studies to "prove" that Hemi-Sync works. Already knowing that the Frequency Following Response or FFR of Hemi-Sync entrains brain waves and alters states of consciousness, TMI's Brainmapping Project uses state-of-the-art monitoring devices to learn what brain-wave frequencies and patterns indicate these changing states of consciousness. The Brainmapping Project uses both an NRS-24 and a J&J System I-330 to this end. The NRS-24 is a color topographic brain-wave mapping system which provides a user-friendly

24-channel data acquisition, analysis, and display environment. The J&J System I-330 provides multichannel physiological monitoring. Both instruments work on separate IBM AT compatibles and, therefore, provide simultaneous brainmapping and physiological monitoring during sessions in the isolation booth in the TMI lab building.

In reviewing topographic brain-wave maps, the first thing one notices is that the brain-wave patterns are never static but dynamically changing with ongoing thought processes. The misunderstood concept of one being fixed in something like a so-called "Alpha State" or "Theta State," due to a predominance of Alpha or Theta brain waves, quickly gives way to a new understanding. This new way of looking at brain waves clearly illustrates that the brain is constantly undergoing electrodynamic changes. States of consciousness can no longer be defined simply as "Alpha State" or "Theta State" but must be identified by persistence, amplitude, frequency, coherence, and neocortical locale of brain waves. Brain-wave maps or patterns of persistence, amplitude, frequency, coherence, and neocortical locale yield vast amounts of information, much of which has never before been available to the researcher or technical monitor. The Hemi-Sync effect can actually be seen for the first time with these brain-wave topographs. Under the influence of Hemi-Sync, identifiable, repetitive synchronous topographic patterns begin to emerge from the cacophony of brain activity. These same patterns are also abundant in subjects who are practiced in meditative skills but are not exposed to Hemi-Sync tones while being monitored. With this information, the subjective reports from numerous users of Hemi-Sync have been affirmed. States of consciousness once available only through months or years of study under a master teacher are readily accessible through the Hemi-Sync process.

The TMI Brainmapping Project continues to examine naive (never been exposed to Hemi-Sync) talented subjects, subjects practiced in Focus 10 and Focus 12, talented subjects who use Hemi-Sync during their activity, and talented subjects who do not use Hemi-Sync during their activity but have used Hemi-Sync to varying degrees. During these sessions in the isolation booth, brain-wave data is recorded by a computer using the NRS-24. The subject's narrative is recorded on tape and a register matching brain-wave data to subjective report is maintained. The J&J System I-330 monitors and records via computer Skin Potential Voltage, Galvanic Skin Response, and Skin Temperature. A ledger equating brain-wave data and the subject's narrative with significant I-330 physiological indicators is maintained. After a brain-wave mapping session in the booth is completed, a transcript of the subject's narrative is prepared and the analysis of the data begins. The brain-wave record must be examined in conjunction with the transcript and the physiological indicators previously noted.

As a final comment, it is interesting to note how subjects who have been brainmapped feel about their experience. Many have reported a sense of verification and reassurance of subjective experiences which would otherwise remain part of an elusive potpourri of unobjectified realities. One's exclusive electrodynamic state of consciousness is fully documented and reflects the brain's unique way of integrating the experiential or informational content of an individual's exploration into the realm of consciousness.

## GIFTED, TALENTED SUBJECTS SOUGHT FOR BRAINMAPPING PROJECT

If one wants to participate in TMI's Brainmapping Project, we are seeking volunteer subjects skilled in acquiring and maintaining Focus 10 both with or without Hemi-Sync, individuals skilled in acquiring and maintaining Focus 12 both with and without Hemi-Sync, and individuals who have successfully implemented *H-PLUS* Functions. Individuals with special skills (healers, telepathists, authors, remote viewers, musicians, artists, etc.) are also needed for "Talented Subject" investigations. Volunteers for the "Talented Subject" investigations will be selected for participation by a committee appointed by the Director of The Monroe Institute. Prospective subjects provide the committee a written description of the "talented" performance. This description must provide the committee with references which may be used to substantiate the presence of the identified talent. The emphasis here is to insure all parties understand that *TMI does not intend to validate nor test a specific talent*. TMI wishes to discover brain-wave information related to bona fide talented subjects for the purposes of improving the Hemi-Sync process. Focus 10, Focus 12, *H-PLUS* and "Talented Subject" participation is funded by TMI as part of our research effort. Volunteer subjects are not paid and individuals not residing in the local area must make their own transportation, food, and lodging arrangements.

Another way in which one may participate in the Brainmapping Project would be as a client. [ed.: see TMI FOCUS, Vol. XI, No. 2, Spring 1990, "What's Happening in the Lab?"].

## REVISION

Mrs. Tricia Bliley [HEMI-SYNC JOURNAL, Vol. VIII, No. 1, Winter 1990, "Hemi-Sync and Multiple Sclerosis"] and her husband are presently in transition. Persons wishing to contact Tricia may send correspondence to:

Shirley N. Bliley, Projects Coordinator  
The Monroe Institute  
Rt. 1, Box 175  
Faber, VA 22938

The Monroe Institute's HEMI-SYNC JOURNAL  
is published four times annually.

### Editors:

Leslie France, Nancy McMoneagle,  
Shirley Bliley

Computer Typesetting and Design:  
John Dumais

Publishing Coordinator:  
Julie Mazo

## JIN SHIN JYUTSU AND HEMI-SYNC IN THE TREATMENT OF QUADRIPLÉGIA



by ChowChow Imamoto, R.N., Ms.D.

*ChowChow Imamoto is known for her pioneering work in holistic health and healing. She is a practitioner, researcher, counselor, lecturer, and teacher in the field, and has worked extensively with both lay and professional groups. Ms. Imamoto became a Professional Division member in June of 1989 and submitted this case study describing the results of her use of energy balancing techniques combined with Hemi-Sync.*

*Case Study: 14-year-old male quadriplegic injured in an accidental fall from a waterslide at age 10.*

The patient was a totally spastic, quadriplegic, tracheotomized, and helpless youngster with blank eyes going in different directions; spine sagging and curved to the right from shoulder blade to hip by about four inches; head rigidly tilted to the right; left leg about six inches shorter than the right (head of femur fractured and was removed);

*Despite his 14 years,  
he looked perhaps 11 years old.*

both legs and arms rigidly contracted; a catheter in place with a bag for urine; upper palate heavily grooved from receiving only soft and liquid foods (with a nasal tube for liquids); skin almost translucent and very sensitive; and abrasive burns about both hands and feet. Despite his 14 years, he looked perhaps 11 years old. At times he experienced seizures from petit to grand mal which were controlled by Nembutal™.

The child was taken home after his initial hospitalization and subsequent surgery to remove the head of the femur. His mother organized volunteers to begin treatment using Dolman-Delacato patterning and increasing sensory stimuli. She also arranged for 24-hour in-home nursing care. The home was outfitted to accommodate the child's needs. The child has continued to receive the treatment described for five years. A volunteer and nurse referred the mother to me a year ago.

I began administering Jin Shin Jyutsu (energy balancing) and other metaphysical treatments. The mother noted immediate improvement and expressed enthusiasm that she and the nursing staff could assist in treatments between my visits. The nursing staff appeared apprehensive about the treatments and we therefore proceeded slowly.

The child improved dramatically during the first two rounds of treatment (six months) after which I suggested

*... the child has begun  
to look like a teenager ...*

that Hemi-Sync tapes be used. First I recommended the *Stroke Recovery Series* and *METAMUSIC Blue and Green*. The mother rejected the *METAMUSIC* and reluctantly agreed to the *Stroke Recovery* tapes. The caregiver team listened and oriented themselves to the tapes before introducing them to the patient. I provided a binder of literature consisting of an article on the use of *Stroke Recovery*, several articles on the *METAMUSIC* and other Hemi-Sync tapes, and information about The Monroe Institute.

At this writing (January 1990), it has been about four months since the introduction of the *Stroke Recovery* tapes. The mother and nursing staff have been most impressed. Jin Shin Jyutsu is now in its fourth round of treatments and the daily combination of tapes with the Jin Shin Jyutsu treatments has shown remarkable results. Improvements can be observed very easily. *METAMUSIC Volume IV* (including *Blue and Green*) was introduced about two months ago. To date, the child has begun to look like a teenager, with secondary sex characteristics and a developing frame. He can straighten his legs on request and move his head. His spastic body and limbs are considerably more relaxed after a Jin Shin Jyutsu treatment. One day his bed was damp when I began to work and I noted that the child had tears in his eyes as I contemplated the dampness. I told the nurse, who discovered that there was a leak in the urine bag. The child's reaction revealed that his emotions are very much intact. His skin texture is much improved. He can raise his head and hold it up. His back is stronger and straighter, and he has grown.

As he improves, I continue to see remarkable results with the combination of Jin Shin Jyutsu treatments and the *Stroke Recovery Series*.

